

REMARKS/ARGUMENTS

Favorable reconsideration of this Application, as presently amended and in light of the following discussion, is respectfully requested.

Claims 5-16 are pending in the present application, Claims 1-4 having been previously canceled without prejudice or disclaimer, Claim 9 having been amended, and Claims 8-15 having been withdrawn from consideration.

In the outstanding Office Action, the figures were objected to under 37 CFR §1.83(a); Claim 9 was objected to; and Claims 5-7, 9, 10, and 16 were rejected under 35 U.S.C. §112, first paragraph, for failing to comply with the enablement requirement.

Applicants respectfully request that Claims 9 and 10 be withdrawn. Claims 9 and 10 were mistakenly grouped with the elected embodiment corresponding to Fig. 29. With Claims 9 and 10 withdrawn, Applicants respectfully submit that the objection directed to elected Fig. 29 not showing the elements of Claim 9 is moot.

With respect to the rejection of the drawings, Applicants respectfully submit that Figure 29 shows every element of Claim 16.

Claim 16 recites

a first semiconductor layer of a first conductivity type, a second semiconductor layer of said first conductivity type having an impurity concentration lower than that of said first semiconductor layer, a third semiconductor layer of a second conductivity type opposite to said first conductivity type and a fourth semiconductor layer of said second conductivity type having an impurity concentration lower than that of said third semiconductor layer.

In a non-limiting embodiment, Figure 29 shows a first semiconductor layer of a first conductivity type (P type) 12, a second semiconductor layer of the first conductivity type (P type) 20t having an impurity concentration lower than that of the first semiconductor layer (12 is P⁺ and 20t is P⁻, and P⁺ has a higher impurity concentration level than P⁻), a third semiconductor layer of second conductivity type (N type) 22, opposite to said first

conductivity type and a fourth semiconductor layer of said second conductivity type (N type) 10t having an impurity concentration lower than that of the third semiconductor layer (22 is N^+ and 10t is N^- , and N^+ has a higher impurity concentration level than N^-).

Claim 16 also recites "a maximum value of a distance between said pn junction and a boundary between said isolator and said semiconductor is not more than $2\mu m$." In a non-limiting embodiment, Figure 1, which shows a basic idea of the present invention,¹ shows a maximum value of a distance between at least the pn junction and a boundary between the isolator 40 and the semiconductor film 20 is not more than $2\mu m$. The Specification defines δ as representing $2\mu m$.²

Furthermore, page 24, lines 19-24 of the specification recites:

Referring to Figs. 17 and 18, the region 30 where the pn junction J5 is positioned is illustrated as dummy region in which a semiconductor element is not formed. As described in the first and second preferred embodiments, however, it is possible to obtain the effect described in Basic Idea of the Invention also in the case that an element may be formed by a pn junction formed separately from a partial isolator or formed under the partial isolator with a distance not more than $2\mu m$.

In light of the above explanation, it is respectfully requested that the objection to the drawings be withdrawn.

With respect to the rejection that Claims 9 and 10 are not enabled by the disclosure corresponding to the elected species shown in Fig. 29,³ Applicants respectfully submit that the withdrawal of Claims 9 and 10 render this ground of rejection moot.

With respect to the rejection of Claims 5-7 and 16 under 35 U.S.C. §112, first paragraph, Applicants respectfully traverse the rejection because the Specification provides an enabling disclosure.

The Specification at page 21, lines 9-18 discloses the claimed

¹ Specification, page 9, line 12.

² Specification, page 13, line 22.

³ Office Action, page 4.

a first semiconductor layer of a first conductivity type, a second semiconductor layer of said first conductivity type having an impurity concentration lower than that of said first semiconductor layer, a third semiconductor layer of a second conductivity type opposite to said first conductivity type and a fourth semiconductor layer of said second conductivity type having an impurity concentration lower than that of said third semiconductor layer.

One of ordinary skill in the art with the above description and Fig. 29 would know how to form the claimed semiconductor device. Furthermore, for purposes of determining if there is an enabling disclosure, the Specification should be viewed as a whole, and not only the sections that describe Fig. 29.

The Specification at page 14, lines 12-17 describes a condition in which a maximum value of a distance between the pn junction and the boundary between the partial isolator and the semiconductor film made by the two semiconductor layers having conductivity types different from each other is not more than $2\mu\text{m}$. One of ordinary skill in the art would be able to make a simple measurement to determine "if a maximum value of a distance between said pn junction and a boundary between said isolator and said semiconductor film is not more than $2\mu\text{m}$ " without undue experimentation.

In view of the above discussion, Applicants respectfully submit that the Specification and Claims 5-7 and 16 comply with the requirements of 35 U.S.C. §112, first paragraph.


Finally, an Information Disclosure Statement (IDS) in conformity with requirements of 37 CFR § 1.97-1.98 was filed on November 17, 2003. The reference cited in the IDS on line AW has not yet been acknowledged or made of record by the Examiner. Accordingly, it is respectfully requested that the references cited on line AW in the IDS filed on November 17, 2003 be acknowledged and that an initialed PTO Form 1449 be sent to the undersigned.

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Reply to Office Action of January 10, 2005

Consequently, in light of the above discussion and in view of the present amendment, the present application is believed to be in condition for allowance and an early and favorable action to that effect is respectfully requested.

Respectfully submitted,

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